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July 6, 2009

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**Application No.** : **2,419,821**  
**Owner** : NEW YORK STOCK EXCHANGE  
**Title** : **METHOD AND SYSTEM FOR AUTOMATIC EXECUTION OF A  
SECURITIES TRANSACTION**  
**Classification** : G06Q 40/00 (2006.01)  
**Your File No.** : **14491-6-N.P.**  
**Examiner** : Donald Lefebvre

**YOU ARE HEREBY NOTIFIED OF A REQUISITION BY THE EXAMINER IN ACCORDANCE WITH SUBSECTION 30(2) OF THE PATENT RULES. IN ORDER TO AVOID ABANDONMENT UNDER PARAGRAPH 73(1)(A) OF THE PATENT ACT, A WRITTEN REPLY MUST BE RECEIVED WITHIN SIX MONTHS AFTER THE ABOVE DATE.**

This application has been examined taking into account the:

Description, pages 1 to 47, as originally filed;

Claims, 1 to 92, as originally filed; and

Drawings, pages 1/26 to 26/26, as originally filed.

This application has been examined taking into account the applicant's correspondence on prior art received in this office on 27 October 2005.

The number of claims in this application is 92.

***Lack of unity***

The application does not comply with subsection 36(1) of the Patent Act. The claims are directed to a plurality of alleged inventions as follows:

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- Group A**      Claims 1-39 and 42- 58 are directed to methods, signals, software products and apparatuses for submitting a securities order to a securities exchange for automatic execution, and for buying or selling a securities order on a securities exchange; and
- Group B**      Claims 40, 41, and 59-92 are directed to methods, signals, software products and apparatuses for buying or selling a securities order on a securities exchange with an auction market crowd.

According to subsection 36(2) of the Patent Act, after limiting the claims of the present application to one invention only, the applicant may make any other invention disclosed the subject of a divisional application. The applicant is advised that once an election has been made, further prosecution of the present application will be limited to the invention so elected.

***Subject matter***

**Signal claims**

The subject matter of claims 8, 20, 37, 51, 66, 75, 83 and 90 is directed to a signal, which does not fall within any category of an invention. Therefore, claims 8, 20, 37, 51, 66, 75, 83 and 90 do not comply with section 2 of the *Patent Act*. Reference is made to the Notices section of the Canadian Patent Office Record (CPOR), Volume 135, Number 33, dated 14 August 2007.

**Business method claims**

**Introduction**

Subject matter objections may be made to either the form or substance of the claimed matter. To identify the substance, or essence, of the claimed matter, it first must be determined what, according to the application, has been discovered. If the discovery or patentable subject matter has not been disclosed, and does not form the substance of the claimed matter, the mere form of the claims cannot make it into a patentable invention.

In this particular case, the subject matter of this application relates to a number of methods and systems to automatically execute a securities transaction against a quote to either buy or sell, without any delays coming from a floor auction, wherein the transaction is not modified by possible price improvements that would usually be involved when dealing with an auction market crowd.

As stated in the description, the methods and systems are appropriate for use in a securities exchange setting, and particularly an exchange with a floor auction market, such as the one provided by the New York Stock Exchange, Inc. (NYSE).

In order to better understand the state of the art, the description also provides an example that describes a transaction on the NYSE, where further details are documented in the New York Stock Exchange Guide, published by Commerce Clearing House. In short, after an investor places an order with an NYSE Member Broker Firm, the NYSE Member Brokerage Firm authenticates and validates the order, and transmits the order to the NYSE trading floor, either by computer or in some cases by telephone. At the NYSE, the Common Message Switch/SuperDot (CMS/SuperDot) safely stores the order and then, based upon the order details and programmed parameters, either routes the order to a broker's booth or directly to the trading post specialist for the stock, where the order appears on the specialist's display book screen. After the trade is completed, post trade processing matches buyers and sellers almost immediately. At the member brokerage firm, the transaction is processed electronically, crediting or debiting the customer's account for the number of shares bought or sold. Finally, shortly after the trade is complete, the investor receives a trade confirmation from his/her member brokerage firm. As can be seen by the example above, there are a number of steps that occur between the time an investor submits an order and the time the investor receives a trade confirmation.

The instant application provides an opportunity to reduce the time by moving some of the steps out of the order execution cycle, or entirely eliminating certain steps, thereby reducing the time between order submission and trade confirmation. The proposed automatic order execution system allows an order entry for immediate execution against the published quote. A member firm, or individual investor seeking speed of execution for their order, designates the order with a suitable instruction, such as tagging the order with a "NX" flag. Other aspects include limiting the size of an order. The "NX" order is then entered into the CMS by a member firm for normal order validation before routing the order to SuperDot, which determines whether the order is eligible for automatic execution. If the order is eligible for automatic execution, it is routed by SuperDot to the specialist display book, for additional checks and immediate execution if eligible.

With reference to Figure 3, and the corresponding passage in the description (i.e. pages 16 to 21), an overview of the method of the invention will be further discussed. The method starts with a customer creating a limit order, where the customer reviews the current quote (the bid and the offer) for that particular security and uses that quote information to set the limit price of the transaction (*determining a quote for a security*). If the customer wants to sell the particular security, he/she must set the limit price for their sell order at or better than the bid (*pricing a*

*securities order equal to or better than the quote for the security).* Likewise, if the customer wants to buy the particular security, they must set the limit price for their buy order at or better than the current offer. At this point, the customer indicates his/her desire for automatic execution (without the opportunity for price improvement) by designating the transaction with a flag "NX", for automatic execution (*identifying the order for automatic execution*). This signals to the broker/dealer and the exchange that the customer wants the order automatically executed without exposure to the auction market for possible price improvement. Once completed, the limit order is forwarded to the broker/dealer, where the method used to forward the order may include electronic, voice or in person (*transmitting the securities order to the securities exchange*). The broker/dealer reviews the limit order, checking for errors and verifying any customer credit requirements. The broker/dealer also notes that the limit order is marked NX and may therefore handle it in a more expeditious manner to enhance the timeliness of the transaction. Once any required checks are completed, the broker/dealer forwards the transaction to the market specialist via the CMS/SuperDot, with the destination being the market specialist display book. In one option, the customer designates the order as "NX", however it is also possible that the broker/dealer can designate the order as "NX". The system performs a number of checks to see if automatic execution is available, and checks to ensure that the limit price of the transaction is at or better than the quote for that particular security to ensure that the order can be automatically executed. The automatic execution, and price of execution, is reported to the customer via the SuperDot/CMS.

It is clear from the above that the substance of the claimed matter is directed to a mere method of performing a securities transaction using known systems (CMS/SuperDot and market specialist display book), and known securities exchange practices, where no new or improved technologies (hardware and/or software) have been provided or disclosed. It is also clear from the above, that many of the decision steps are performed by either the customer, the broker/dealer, or the market specialist, such that there is no end-to-end automation or automatic execution being performed.

#### Business methods

Methods for submitting a securities order to a securities exchange for automatic execution, and buying or selling an order on a securities exchange are unpatentable. Subject matter residing in the same category as a mere method of accounting or transacting, or a mere method of improving a way of conducting some kind of business that does not add to the technological wisdom or amount to any technological advantage will be rejected.

Manual and productive arts

The methods for submitting a securities order to a securities exchange for automatic execution, and buying or selling an order on a securities exchange do not belong to what the jurisprudence calls the manual and productive arts. The "manual and productive arts" is but one of many labels that the courts have over the years applied to the realm of potentially patentable subject matter as contrasted with that subject matter which can never be patented. It may be helpful to think of the manual and productive arts as being equated with the industrial arts, or with the "field of technology". According to the jurisprudence, in order to belong to the manual and productive arts, a method must change the character, condition, or state of an object. In doing so, the method must do more than implementing a mere plan, theory, or concept of action that does not produce a technological result proceeding directly from the operation of the method itself. In this particular case, the substance of claimed matter is nothing more than the mere automation of a securities transaction (*a mere plan, theory, or concept of action*) that produces no technological result.

Conclusion

Therefore, the discovery behind, or essence of, the subject matter in claims 1-92 does not satisfy the requirements stated in section 2 of the *Patent Act*.

Preliminary search results

As the application is apparently directed to a plurality of inventions, the search and substantive examination of the claimed subject matter have been deferred pending the applicant's response to the present requisition.

However, in order to expedite prosecution, the examiner has identified the following relevant prior art references stemming from either an International Search Report (ISR), a foreign prosecution, or the prior art list, as provided by the applicant in his correspondence of 22 July 2005, which may be applied in a subsequent action:

References of interestPCT applications

98/13778	02-Apr-1998	G06F-17/60	MARTYN et al.
95/18418	06-Jul-1995	G06F-17/60	HAWKINS et al.

United States patents

4,674,044 ☐	16-Jun-1987	G06F-15/20	KALMUS et al.
6,014,643 ☐	11-Jan-2000	G06F-17/60	MINTON
4,412,287 ☐	25-Oct-1983	G06F-15/20	BRADDOCK III

☐ citation stemming from a foreign search report

***Non-prior art deficiencies***

Where possible and in order to expedite prosecution, the non-prior art examination has been extended to cover claims. In doing so, the examiner has identified the following defects in the application:

**Claims**

Claims 31, 43, 49, 50, 54, 58, 64, 65, 87, 90, 91, and 92 are indefinite and do not comply with subsection 27(4) of the *Patent Act*. The following expressions have no antecedents:

- “the entire securities order” (claim 31);
- “the security” (claims 43, 49, 50, 54, 64, and 65);
- “the status of at least a portion of the order” (claims 43 and 54);
- “the size” (claim 58); and
- “the transaction” (claims 87, 90, 91, and 92).

**Description**

A statement in an application, such as found on page 1, lines 5-7; page 5, lines 7-9 and page 20, lines 9-10 which incorporates by reference any other document, does not comply with subsection 81(1) of the *Patent Rules*.

Drawings

The applicant is requested to submit replacement pages compliant with subsection 68(1) and section 82 of the *Patent Rules*. Pages containing Figures 6 and 9E are either illegible, of poor quality, or unsuitable for reproduction.

In view of the foregoing defects, the applicant is requisitioned, under subsection 30(2) of the *Patent Rules*, to amend the application in order to comply with the *Patent Act* and the *Patent Rules* or to provide arguments as to why the application does comply.

Donald Lefebvre  
Patent Examiner  
819-997-2822